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tgaattcggt tggttttgt ttttggtaact ttatgccccca aaactccttt aacatttgc 1261
ataatgtgtt tgaacct

IN THE CLAIMS:

Please delete claims 38, 39, 42, 43, and 44.

Please amend claims 1, 5, 15, 24, 26, 35, 36, 40, and 41 as follows:

1. (amended) A method of modulating seed mass in a plant, the method comprising:

providing a first plant comprising a recombinant expression cassette containing an *ADC* nucleic acid linked to a plant promoter, which *ADC* nucleic acid encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which *ADC* nucleic acid encodes a polypeptide that modulates seed mass or oil content;

selfing the first plant or crossing the first plant with a second plant, thereby producing a plurality of seeds, and

selecting seed with altered mass.

5. (amended) The method of claim 2, wherein the *ADC* nucleic acid is selected from a group consisting of SEQ ID NO:3, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

15. (amended) The method of claim 14, wherein the *ADC* nucleic acid is selected from a group consisting of SEQ ID NO:3, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 [Genbank

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accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

24. (amended) A seed comprising a recombinant expression cassette containing an ADC nucleic acid, which ADC nucleic acid encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which ADC nucleic acid encodes a polypeptide that modulates seed mass or oil content, with the proviso that the seed is not from *Arabidopsis*.

26. (amended) The seed of claim 24, wherein the ADC nucleic acid is selected from a group consisting of SEQ ID NO:3, SEQ ID NO: 100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO 110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

35. (amended) A transgenic plant comprising an expression cassette containing a plant promoter operably linked to a heterologous ADC polynucleotide, wherein the ADC polynucleotide encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which ADC nucleic acid encodes a polypeptide that modulates seed mass or oil content, with the proviso that the transgenic plant is not *Arabidopsis*.

36. (amended) The transgenic plant of claim 35, wherein the ADC polynucleotide is selected from a group consisting of SEQ ID NO: 3, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO109, SEQ ID NO 110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

40. (amended) An isolated nucleic acid molecule comprising an expression cassette containing a plant promoter operably linked to a heterologous *ADC* polynucleotide, wherein the *ADC* polynucleotide encodes a polypeptide comprising an AP2 domain which is at least 95% identical to SEQ ID NO:4 or SEQ ID NO:5 and which *ADC* nucleic acid encodes a polypeptide that modulates seed mass or oil content, with the proviso that the isolated nucleic acid is not SEQ ID NO: 3.

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41. (amended) The isolated nucleic acid molecule of claim 40, wherein the *ADC* polynucleotide is selected from a group consisting of SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

Please add claims 45-114 as follows:

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--45. A method of modulating seed oil content in a plant, the method comprising:

providing a first plant comprising a recombinant expression cassette containing an *ADC* nucleic acid linked to a plant promoter, which *ADC* nucleic acid encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which *ADC* nucleic acid encodes a polypeptide that modulates seed mass or oil content;

selfing the first plant or crossing the first plant with a second plant, thereby producing a plurality of seeds; and

selecting seed with altered oil content.

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46. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:96.

47. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:97.

48. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:98

49. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:99.

50. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:100.

51. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:101.

52. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:102.

53. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:103.

54. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:104.

55. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:105.

56. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:106.

57. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:107.

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58. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:108.

59. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:96.

60. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:97.

61. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:98

62. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:99.

63. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:100.

64. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:101.

65. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:102.

66. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:103.

67. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:104.

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68. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:105.

69. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:106.

70. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:107.

71. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID NO:108.

72. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:96.

73. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:97.

74. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:98.

75. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:99.

76. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:100.

77. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:101.

78. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:102.

79. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:103.

80. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:104.

81. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:105.

82. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:106.

83. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:107.

84. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:108.

85. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:96.

86. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:97.

87. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:98.

88. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:99.

89. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:100.

90. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:101.

91. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:102.

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92. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:103.

93. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:104.

94. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:105.

95. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:106.

96. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:107.

97. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:108.

98. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:96.

99. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:97.

100. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:98

101. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:99.

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102. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:100.

103. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:101.

104. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:102.

105. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:103.

106. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:104.

107. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:105.

108. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:106.

109. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:107.

110. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:108.

111. The method of claim 1, wherein the *ADC* polynucleotide encodes a polypeptide comprising an AP2 domain which is at least 60% identical to SEQ ID NO: 4 or SEQ ID NO: 5.

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